

**Notice of Allowability**

Application No.

10/748,130

Applicant(s)

MING-ER ET AL.

Examiner

Christopher Boswell

Art Unit

3676

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed December 31, 2003.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☒ The drawings filed on 31 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

Art Unit: 3676

## DETAILED ACTION

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows, to change minor informalities within the specification:

Change the title from "Improved Lock" to --Burglarproof Lock Core with Plate Tumblers--.

Change "is" to --are-- in line 13, page 1.

Change "close" to --closed-- in lines 21 and 22 of page 1; and lines 29, 30, 33 and 34 of page 2.

Replace "recesses" with --recess-- in line 23, page 1.

Change "has" to --have-- in line 5, page 3.

Replace "is" with --are-- in line 8, page 3.

Change the reference number for the "key 40" to --key 60--, in line 10 of page 3.

Change "At" to --Wherein-- in line 17, page 3.

Replace "it point a" to --it points to a-- in line 25 of page 3.

Replace "is" with --are-- in line 28, page 3.

Change "pine" to --pin-- in line 29, page 3.

Replace "of thief" with --of a thief-- in line 13, page 4.

Change the reference number of "spring 30" to --spring 80--, in line 15, page 4.

Change "set" to --sets-- in line 17, page 4.

Replace "then, user" with --then, the user--; and "to left" with --to the left-- in line 15, page 5.

*Allowable Subject Matter*

Claims 1-7 are allowed. The following is an examiner's statement of reasons for allowance: The claims are allowable over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the combination set forth, including that of an inner housing having an annular slot and a position slot, which is communicated with the annular slot, at the exterior side thereof, where a tumbler pin is received in the position slot to restrain the inner housing from rotation while the inner housing is moved to a first position and the first tumbler pin is received in the annular slot of the inner housing to release the inner housing for free rotation while the inner housing is moved to a second position (claim 1, page 6, lines 22-24, and 29-33; claim 7, page 7, lines 29-33, and page 8, lines 11-15).

U.S. Patent Number 1,893,142 to Jacobi discloses a lock comprised of an inner housing with an annular slot, a position slot at an exterior side and a driving section, a plurality of locking plates and moveable pins. However, Jacobi fails to disclose a first tumbler pin being received either in the annular slot or in the position slot.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 3676

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to lock assemblies with locking plates:

U.S. Patent Number 6,725,696 to Blight et al., U.S. Patent Number 6,644,078 to Hung, U.S. Patent Number 5,388,438 to Paavo, U.S. Patent Number 4,920,774 to Martin, U.S. Patent Number 4,838,055 to Gallagher, U.S. Patent Number 4,651,546 to Evans, U.S. Patent Number 4,370,875 to Piironen, U.S. Patent Number 4,062,211 to Miller et al., U.S. Patent Number 4,008,588 to Miller et al., U.S. Patent Number 2,217,047 to Fitzgerald, U.S. Patent Number 2,039,244 to Lowe, U.S. Patent Number 1,987,735 to Falk.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Daniel P. Stodola". The signature is fluid and cursive, with a large initial "D" and "S".

CJB  
July 8, 2004

DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600